

# THE SCHOOL ARTS BOOK

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## NOT HOW MUCH, BUT HOW WELL



**A**MONG the throng of visitors from other lands who have so eagerly studied our institutions, and especially our schools, for the last few years, I suppose very few have impressed those with whom they have come in contact as keener observers or cooler judges than the former minister from China, Mr. Wu Ting Fang. He was a visitor, too, whose intelligence was quite equalled by the frankness of his criticisms of what he saw, and it is very much to our credit that he seems to have won his way to the high place which he certainly attained during his residence here in the estimation of those who came to know him best, quite as much by his courage and candor as by any of the other good qualities which he undoubtedly possessed.

I had the pleasure of conducting him through the School of Industrial Art, and of explaining the aims and methods which characterise it, and in which I hope I may be pardoned for feeling a certain amount of professional pride, and I shall not soon forget the perfectly frank opinion which he expressed as he began to realize the scope of the

work which was under examination. It came without a word of that kind of qualification or modification which occidental stewards of politeness regard as indispensable. "You try to do too much."

I thought at the time, and I am still inclined to think, that the plain-spoken Celestial's appreciation of the school's aims and objects was hardly as cordial as it well might have been, but I am not at all sure but that he was more than half right in his main conclusion.

I believe he was accustomed to say much the same thing regarding the work of other schools which he visited, and of our educational system generally, and the worst of it is, I am inclined to think that his judgment is rather generally shared by the students of our methods from the outside, from whose observation and reflections we have most to learn. We do try to do too much in most of our schools. Let us admit it frankly, and begin to think about correcting a fault which has been growing a good deal too fast in recent years.

Not only do we try to teach a whole lot of things which we do not more than half understand ourselves, but we try to teach them under conditions that would make our instruction of very little account, even if we teachers were personally much better equipped for the work than we are.

I am speaking of elementary education, not of high schools and colleges, and while I have no

doubt that plenty of illustrations of what I mean might be taken from other studies, I am at present especially concerned with the work which has come to be included under the head of Drawing. It is true that much that is so included is not drawing at all, but it has crept into the schools under the guise of being related to that subject, and the drawing teacher has been charged with the duty of directing it. It is not that there is any very serious objection to the branches which have been introduced in this way considered in themselves; it is only that their introduction means too much division of energy and effort; that effort is frittered away by being directed into too many channels, the "too much" in these cases meaning "too many." I am aware that to some this very diversity is in itself a distinct advantage. I have heard it warmly praised very recently as a distinguishing characteristic, and conspicuous merit, of present-day American methods; that the pupils in our elementary schools are introduced to a whole lot of things instead of being drilled with considerable persistence in a smaller number of subjects, but for my part I am convinced that it is in this direction of diversification and multiplication that our danger lies, and that we would accomplish a good deal more than we do if we did not undertake so much.

But it is probably not through the mere multiplication of subjects that we are going wrong so

much as in our readiness to take up and push into prominence phases and forms of application of which the teachers themselves cannot possibly have more than the merest glimmering of a comprehension. This is the unpardonable sin, after all. It is bad enough and foolish enough to bother the heads of young pupils with matters which we have not the slightest grounds for believing they can get any profit out of, but it is ten times worse for teachers to try, or to pretend, to teach something of which they have not the slightest comprehension themselves. It is quite true that there are some studies that can, and that do, manage to get themselves taught in fairly presentable fashion by teachers who know mighty little about them, because they are such as adjust themselves readily to the bookish method, and so are made to fit, without undue friction or violence, into the mechanical systems which are so much in vogue among us to-day. For if the age in which we live worships one idol more than all others, it is the automatic machine, that does all sorts of things with the least possible interference of human intelligence or individual will, and I am very much afraid that the educational machine on whose construction so much ingenuity and energy is in process of being expended, exemplifies all too plainly this same tendency to perfect the method, rather than to develop the master.

There are, as I have said, some studies that lend themselves readily enough to this kind of treatment, but art is not one of them, and the more ambitious the aim that accompanies the attempt to treat it dogmatically, or from any literary standpoint whatever, especially that represented by the hand-book, the text-books, or the official syllabus, the more dismal is the failure. Art in the schools? Yes, by all means, all we can possibly get! Only let it be good art, and let the manner of its presentation be dignified and in good taste.

Let the children see all the good pictures you can, of course, but remember that the influence, in the school-room, of one good picture or cast, large enough and important enough to really challenge the children's attention and command their admiration, is worth more than any number of dozens of little things, by the very multiplication of which it is so easy to cheapen and dissipate the interest which we seek to cultivate.

Explanation and discussion of the aims of the artist and the spirit in which he works—all this that comes under the head of "picture study?" Yes, certainly if such discussion can really be intelligent and appreciative, and not a mechanical reproduction of the mushy sentiment about the old masters and Barbison, and all that with which the hand-books are filled on the one hand, or on the other the vamping about impressionism or any

other passing craze which happens to be current in the studios of the fledglings of whom there is always a flock to reckon with.

Handwork and the use of tools? Yes, anything that brings young minds into contact with real things, instead of the miserable books which have monopolized our attention and twisted our judgment so long, but not to the exclusion of subjects which enlist and demand a certain amount of seriousness and the exercise of other powers beside the impulse to play. The methods of the kindergarten are doubtless great fun to a considerable number of little folks, although it is perfectly apparent that to many others they mean very little except an insult to their intelligence, but in any case there is no reason for continuing them as long as school age endures, nor is there any good reason why the time that is devoted to these "gifts" and "occupations" should be taken from the drawing time any more than from that assigned to arithmetic or geography.

Besides, I am not at all sure that the case is so very different with the work which is in the strictest sense to be regarded as instruction in drawing. The place of the study in general education is now assured. The battles in its behalf have all been fought and won, but anything like definite aims and settled convictions regarding the manner in which it should be pursued, seem about as far off as ever,

and no study is more at the mercy of the faddist. This is not the place to discuss these aberrations in detail; the main thing to say now is that the wasted energy which they represent is largely chargeable to the unreasonable extent of the ground which we try to cover. To reduce this would in itself mean concentration of effort, and would increase the chances of success.

Why not start the new year with some such resolve as this: to look over our stock in trade and resolutely weed out the things which either our own zeal, or what we have regarded as the pressure of our needs has led us to collect, but for which a little experience has taught us we have no real use; to devote our energy and enthusiasm to doing better the things which we feel reasonably sure that we are doing fairly well already; and to hope, and pray, and work, for the time to come when quality shall count for more than quantity, and when something beside the encyclopædia shall set the standard and dominate the ideal by which the teacher is guided to the end, that he may write over his door, and in the hearts of his pupils, "Not accumulation, but development."

LESLIE W. MILLER

## HAMMERED METAL

### I



HERE is something about working in metal that appeals to boys; something eminently masculine and peculiarly interesting in forming the hard material into beautiful and lasting forms.

Several kinds of metal working have been introduced into the public school manual training courses in the last few years, all interesting, and all of considerable educational value.

The heavier processes, such as casting, turning, and wrought iron work, have, on account of the expense of equipment, been mostly confined to the high schools with considerable money at their disposal. Probably it is best that this work should remain in the upper schools.

Venetian or bent iron work has been placed in the 6th and 7th grades, and has doubtless proved a godsend to fill in the manual training course at that difficult period. Yet I do not feel satisfied with the results in this line of metal work. There are so few useful objects that can be made without using wood or sheet metal as a basis, especially where binders instead of rivets are used, that the work often proves to be very flimsy, children lose respect for it, and I question its educational value compared with that of other things. Where rivetting is tried the result is certainly more permanent yet far from satisfactory.



A simple form of stamped or repousse cold sheet metal work may be carried on with an inexpensive equipment and much more satisfying results, although it cannot be conveniently done without benches and vises.

I shall speak of this work from a successful experience with 7th grade boys in the Oak Park, Ill., public schools.\*

Our first problem is a small tray. The stock should be cut to 6"x7", one piece for each student.

It would be better for the teacher to flatten each piece of metal himself, before the class begins, by placing it upon a large block of hard wood and striking it with the side of one of the smaller blocks until it lies perfectly flat. If the boys are allowed to do this the noise will be frightful. Avoid beat-

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\* The equipment required for a class of twenty boys is as follows:

**INDIVIDUAL EQUIPMENT.** A bench or at least a vise is the first requisite; then a block of hard wood (oak, hickory, iron wood, 12"x3"x3"); a small block of steel or iron for rivetting (very often these may be obtained from the scraps of some foundry at a very small cost. They should have at least one flat surface and one right angle and ought to be 1-2 inch or not more than 3-4 inch thick); a block of soft wood, pine or cypress, free from knots, 9"x12"x2"; a pair of trimmer's shears, No. 6, cost 30 cts.; a small brad-set used as a rivet punch, 10 cts.; a half round file, medium, 15 cts.; a hard wood mallet, 25 cts. (this must be ground off on one end to present a rounded or hemi-spherical shape); a ball pein hammer, 40 cts.; a pair of flat pliers, 20 cts.; a pair of round nose pliers, 20 cts., and a small screw driver, 15 cts.

**GENERAL EQUIPMENT.** Four pair metal shears, large, cost of each, 50 cts.; 10 rat-tail files, 10 cts. each; 5 wood rasps, medium, 15 cts. each; 3-4 inch steel round head screws; wire brads, 20d, 10d, 6d; 12 sheets fine emery paper; 5 small rivet sets, 20 cts. each; some scraps of soft wood; a roll of soft sheet brass, gauge 23, 12 inches wide, costing at wholesale 18 to 20 cts. per lb., or some sheets of soft sheet copper, gauge 23, costing 20 to 25 cts. per lb.

Fig. 1

Edge of paper

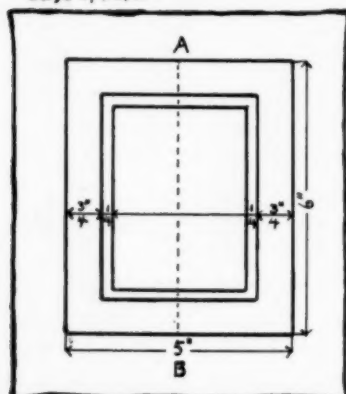
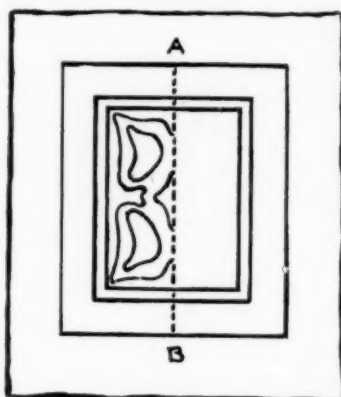


Fig. 2.



ing metal with metal. The contact of metal stiffens brass much more than contact with wood, and it is desirable to keep it soft as long as possible. Copper is much more tough and pliable than brass. consequently it will stand more working before it becomes brittle.

Every well-equipped shop should have a drawing outfit for each student consisting of a drawing-board, T square, 30° triangle, 60° triangle, compasses, ruler, thumb-tacks and paper.

Each boy should place his paper in the centre of his board and draw the diagram, figure 1. The teacher must insist on accuracy. A student should not be allowed to go on until this is correct. A good

margin of paper should be left around the whole, say one inch.

Upon one side of the line ab, within the smallest rectangle, draw any simple floral or conventional design, avoiding small spaces, as shown in figure 2.

This should be a pattern that will form a good two part or four part symmetrical design (see figure 3 for illustration). Explain to the student the difference between the pictorial line and the line of a designer. The first should be a free sketchy line suggesting the play of atmosphere, but the latter should be clear and single though not necessarily black or hard. Now fold upon ab with drawing inside the fold, and by rubbing on the back with a smooth, hard surface, transfer the lines making a symmetric pattern, figure 3; with the metal shears, which will cut paper as well, trim the drawing as shown by heavy lines (figure 3), leaving a flap at the top as shown. The design is now ready for transferring to the metal.

Upon the sheet of metal, which should be cut exactly 6"x7", draw a diagram as shown in figure 4, and with a nail set punch holes as indicated, large enough to take the small screws. Do this punching upon one side of the hard wood block. More holes than this are unnecessary; fewer will not be sufficient to hold the metal firmly. These holes should be in the middle of the 1-2 inch margin.

Fig. 3.

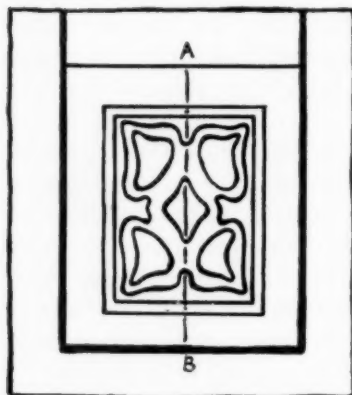
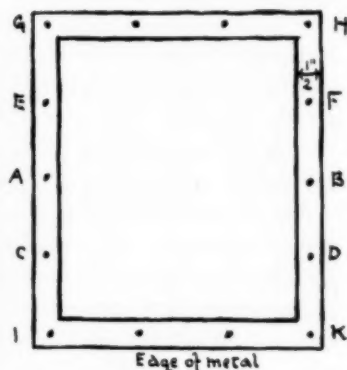


Fig. 4.



We are now ready to screw the metal upon the block. Metal chasers and engravers use a bed of warm pitch beneath their work, but the clear, soft wood will do excellently for our purpose. Locate the metal in the centre of the block and mark around it with the pencil. Start holes with the punch at points A and B, figure 4, and set in the screws way to the head, being sure that the metal lies flat between. Then put in the other screws working from the centre toward both ends as CD, EF, figure 4, pressing the metal perfectly flat as you go. Should you put in screws G, H, I, K, first the sheet might buck up in the middle as in figure 5 making a surface that would vibrate under the tool.

Now fit the drawing as shown in figure 6 within the rectangle on the metal that represents the edge of the tray, and attach the flap with three thumb-tacks to the end of the wood block (figure 6), slip a piece of carbon paper under the sheet and transfer the drawing by going over the lines with a hard pencil. The carbon line, however, will not be sufficient, as in working over the metal the hand is likely to rub off the line.

At this point we need to make a scratch awl from one of the small wire brads by filing it to a point with the half-round file (flat side). This should be done by placing the nail in the vise between two chips of soft wood to avoid scarring the vise. Using this point scratch in the lines of the design and border.

We are now ready for forming the relief. Take a rod brad and file it as shown in figure 7 making a small square stamp on the end. Hold this upright in the left hand as shown in figure 8 and tap it with the hammer held in the right hand. Practice this first on the outer edge of the metal between the screws, being careful not to run over the lines of the design. Do not try to set the metal in deeply or the tool may go through. Avoid uneven depths like this (figure 9a). Try to keep the stamping of about equal depth, b.

After a little practice for control of the tool, begin to stamp the background of the design. As a rule

Fig 5



Fig. 8.

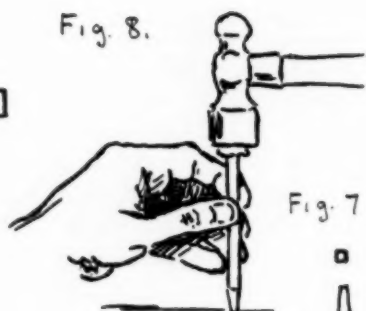


Fig 6.

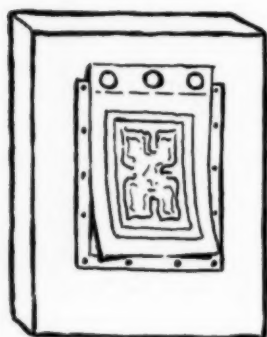


Fig. 7



Fig. 9.

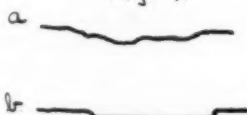


Fig. 10



Fig. 11.

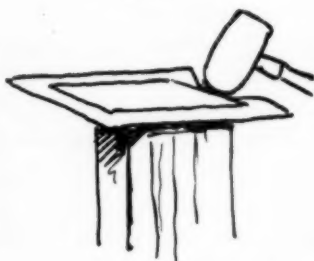


Fig. 12

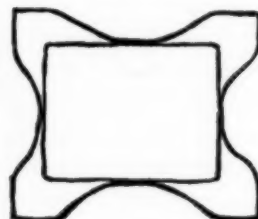


Plate I

the work looks better if the background, rather than the design is stamped. Deep stamping, high relief, is not desirable and may result in perforating the metal with the tool. As the stamping progresses the pattern rounds up in a pleasantly embossed design, showing a contrast of roughened background and smooth relief. On a small piece of work it is better if the stamp be rather small.

No student should be allowed to leave his work until the stamping is clean and sharp to the line.

When this is accomplished file a 20d wire brad to a screw driver edge as in figure 10, and polish it smooth with emery paper. Be careful not to get a sharp edge which might cut the metal.

This little chasing tool is useful for accenting the lines of the design where it seems to need it.

Now remove the screws and with the shears trim off the outer edge of the metal which contains the screw holes. Cut always near the joint of the shears, not at the point, and thus accomplish the most work with the least energy.

Upon the back of the metal draw the border all around just 3-4 inch from the edge.

This may be left as a pencil line. Set the hard wood block in the vise, end up, and placing the metal, raised surface downward, beat the middle of each side over the square edge of the end of the block using the round end of the mallet as shown in figure 11. Bend down only the middle of each side

Fig. 13. INCORRECT

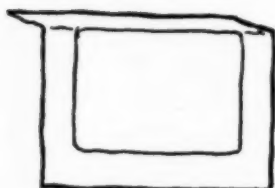


Fig. 15.



Fig. 14

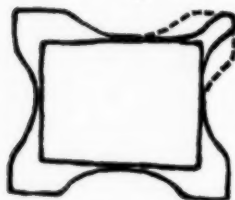


Fig 16.



Plate II



(figure 12) for if one side is beaten way to the corners as in figure 13 it will be impossible to get a nicely finished corner.

After the four sides are beaten, as in figure 12, begin to work the corners up smaller from two sides, as shown in figure 14, working up carefully first from one side and then from the other. A very little practice with the mallet will enable you to do this quite easily if it is held properly. Never grasp a mallet or hammer rigidly or force it down with the whole weight of your arm. Hold it in the hand loosely, allowing the weight of the head to do the work.

The tray should now look somewhat like figure 15. The corners are sharp and should be trimmed off carefully with the shears. If the edges are rough, smooth them with the rat-tail or half-round file, and finish with emery paper.

To relieve the straightness of the sides and make the tray more ornamental, set it on the end of the hard wood block and with the mallet beat out the sides to an even curve as shown in figure 16.

The tray may now be polished bright or colored by heating slowly over a gas jet, or flame. Very beautiful color tones may be gotten on copper in this way, but the metal should first be made perfectly clean by the use of whiting or salt and vinegar.

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## THE TEACHING OF LETTERING



LIFTING is the purpose of all teaching. Its accomplishment calls for an ideal. Ideals are products of the imagination; creations resulting from new combinations of known facts. Education recognizes that one possesses those things only which he gives away: that the growth of the creative power is in proportion to its expression of itself. The recognition of growth through expression suggests an ever-moving ideal—a greater intensity of struggle—a farther reaching onlook.

I. IDEAL. The teacher truly educates when he lives in the feeling that within himself and within his pupil lies an infinite ideal, enriched by facts, developed by expression, moving with irresistible power to a larger onlook.

This possession of the life of feeling, the soul-life, is the determining power which distinguishes the work of the master of the art of teaching from the superficial so-called teaching which deals with tangible results only. The former is in harmony with universal order and unity, the latter is a collection of isolated experiences.

Every new subject or phase of a subject introduced into public school work offers a temptation to superficial teaching because of the small proportion of time teachers find for thorough and original thought.

Lettering often means merely a search for a copy to be used in an exercise to-day. The pupil has a claim to more: to the knowledge of underlying principles which will aid in the freeing of his power of independent and original thought. Given this fundamental knowledge, the special exercise of to-day possesses new meaning.

**II. FACTS.** The reaction against the old-fashioned "written paper" made with no respect for beauty is bringing booklets into prominence. This demands a knowledge of the printer's art and presents the following subjects for thought:

1. What are the principles underlying the construction of any object?
2. Wherein are they evident in the art of book making?
3. What are the most important events in the evolution of the book?
4. What styles of booklets are most suitable for public school work?
5. What are the most important events in the evolution of the alphabet?
6. What are the fundamental alphabets?
7. What exercises will give pupils a worthy ideal, necessary facts, opportunity for expression, a larger outlook?

This article is concerned with the last three questions. Excellent replies may be formulated by any one who will consult the following authors:

Miss Edwards on "The Hieroglyphic Writing of the Ancient Egyptians" to learn of the birth of lettering: Strange on "Roman Lettering and its Derivatives," "The Middle Ages" and "The Beginning of Printed Letters," to feel the life which was active in originating forms: Day on "Art in the Alphabet."

Filled with interest and inspiration by the above authors, turn to Daniels for a definite study of form, to Reinhardt for practical suggestions on easy, convenient freehand lettering and to Bailey's "Gift of the Printers," for many helpful hints.\*

The following is one arrangement of a series of exercises calculated to serve as a foundation for intelligent printing in harmony with the thought to be expressed and the place for which it is intended.

The competent presentation of the subject of lettering requires the recognition of many details not mentioned in the following exercises because they are so clearly illustrated in Mr. Daniel's book.

#### EXERCISE I. Proportions.

Sketch rectangles or spaces indicating heights and widths of letters.

Capitals: If the space allows, those of a pleasing rectangle, e. g., 2 to 3:5 to 8.

If the space is noticeably high or wide, elongate or extend the rectangle to be in harmony with it.

Lower Case: Retain the proportion adopted for capitals. Heights should be 3-5 that of capitals. Long letters follow the rule for script.

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\* *Pharaohs, Fellahs and Explorers.* By Amelia B. Edwards. New York, Harper Bros.

*Alphabets* — pp. 298. By Edward F. Strange. London, George Bell and Sons.  
*Alphabets, Old and New.* L. F. Day, pp. 39, plates 178. New York, Charles Scribner's Sons.

*Freehand Lettering*, — pp. 34, plates 13. By Frank T. Daniels. Boston, D. C. Heath.

*Lettering* — pp. 23, plates 8. By Chas. W. Reinhardt. New York, D. Van Nostrand Co.

*The Blackboard in Sunday School*, — pp. 132, fully illustrated. *The Gift of the Printers*, Chapter VI. Boston, W. A. Wilde Co.

**EXERCISE II. The Gothic Alphabet.**

1. Determine proportions of rectangle.
2. Determine width of members (Daniels suggests that it be 1-7 of the height of the letter).
3. Notice the letters whose stability is partly secured by placing their horizontal member above the middle: B, E, H, R, S.
4. Draw the letters which just fill the given rectangle: D, F, H, L, N, P, U. See figure I.
5. Draw the letters which, to avoid a top-heavy effect, are narrower in their upper part: B, E, K, R, S, X, Z. See figures II, VI, VII. (The condition applies to C and G but their drawing is better included in the following group.)
6. Draw the letters whose curved outlines reduce their apparent size so that they must extend beyond the given measures: G, C, O. See figure III, VII.
7. Draw the letters whose inclined lines cause them to appear contracted hence which need a slight increase of height and width: A, V, Y.
8. Draw the letter T whose vertical member shortens the appearance of the horizontal member so that it is necessary to extend it beyond the given limits.
9. Draw the very narrow letters: I, J (3-4 width).
10. Draw the letter M, which is wider than the given limits. See figure V.
11. Draw the letter W, which is much wider than the given limits.

NOTE: All letters which vary from the given proportions are dependent for their beauty upon the judgment. The variations must be slight.

**EXERCISE III. Spacing.**

Aim to secure unity in the appearance of a word and of a sentence.

Suggestions: The space between the letters of a word depends upon the forms of the letters, e. g., contiguous vertical lines demand more space as in H E. Contiguous curved lines demand less space, as in O C. Adjacent letters whose forms create much space need to be brought nearer, as in L Y.

Between words the space is about twice that between letters.

Between lines, the space often equals the height of the shortest letters in either line. Aim for clearness.

**EXERCISE IV. Modifications\* of the Gothic Alphabet.**

The following modifications are intended first, to suggest variety; second, to lead gradually to an appreciation of the intricacies of the Roman alphabet.

Exercises should group the letters as in the study of the Gothic alphabet and emphasize the facts obtained from its study.

- Modifications: 1. By the use of narrower members, e. g., H N.  
2. By the addition of ceriphs. See figures IV and V.

**EXERCISE V. The Roman Alphabet.**

A study of chapter nine of Daniels, of Bailey's "Gift of the Printers," and of page 32 of Day will reveal the following refinements characteristic of the Roman alphabet:

1. The use of broad and narrow members. See figures VI and VII.
2. Gradations in the width of some broad members. See figure VII.
3. Ceriphs—observe their curved union with members. See figures VI and VII.

Exercises should give practice on the letters in the groups previously suggested and should emphasize the facts learned in the study of the Gothic alphabet.

**EXERCISE VI. Lower Case Letters.**

These are subject to the same principles which control capitals. Pupils should become familiar with a lower case alphabet which is in harmony with each of the three alphabets above mentioned. Simplified forms of the a and g are better in practical work.

**EXERCISE VII. Lettering Mechanical Drawings.**

The skeleton form of the Gothic alphabet with or without ceriphs is a foundation. By the substitution of straight lines for the curves the entire construction may be mechanical. See page 46 of Cross's "Mechanical Drawing."

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\* These modified forms are termed by printers "antique."

**EXERCISE VIII. Freehand Lettering.**

The above studies supplemented by an adoption of the many hints given by Reinhardt make possible an intelligent, useful, easy form of expression. The following suggestions are offered:

1. The details determined by previous exercises must be strictly adhered to in spite of the disregard of some of them by Reinhardt.
2. The value of the book lies in the careful attention given to the means of avoiding common errors and in the definite directions for the best order of forming the letters.

**III. EXPRESSION.** The illustrations accompanying this article suggest large copies to place before pupils that details may be evident.

Media used in the following order gradually bring skill: crayon on the blackboard, large crayon on paper, pencils with large soft lead, medium pencil, the pen, the brush.

Beginners (first grade) are entitled to the help of prepared spaces within which to place their letters.

Helps in acquiring skill in freehand and lettering are:

1. Use of Japanese tracing paper over a set of ruled lines giving seven spaces.
2. Gradual reduction in the number of the spaces until no guide is necessary.

The opportunity for the struggle for accuracy (truth); for the continuous search for Beauty of form; for the expression of harmony between the printed matter and its position;—these with the pupil's consciousness of his growing skill may be

made a powerful factor in a child's education if the spirit of the teacher is intent upon the elements in the subject which are worth while.

IV. ONLOOK. This fundamental study leaves us with the possibility of understanding some variations of the letters and opens the vision to an interest in Old English, in German text, in Ecclesiastical forms. It leads us into the study of the beauties of illuminated manuscripts, and of the use of ornament with initial letters.

The pupil feels a dignity attaching to his booklet as he realizes his ambitions are similar to those of many persons whose lives have been devoted to beautiful printing. The effort is to him an experience which connects him with the life about him and brings him a sense of the strength and inspiration found in working in harmony with universal thought.

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## ANNOTATED OUTLINES

### JANUARY

#### GENERAL TOPIC, OBJECT DRAWING



PERHAPS the first week or more in January might well be given to the making of calendars for the new year, especially in the middle and upper grades. Calendar pads may be had for about one cent each, for which appropriate mounts may be designed and made, as simple or as elaborate as the conditions suggest. Whatever ornament is added should be appropriate to any and all the months, unless the calendar is for one month only. The whole should hold together as a unit. A calendar pad and a picture, or a pad and an abstract spot, is not necessarily a good design. The mount must not be too elaborate; the calendar must hold first place without a struggle. In all cases it is well to have the design worked out first in manila paper to insure good form and good proportions, and well placed parts. The material for the finished product may then be selected, and the color scheme fixed.

A calendar such as might be within the powers of a fifth grade is shown at 1 on Plate III. The color and shape of a calendar pad in this case determined the size, shape, and color of the mount. The motto—that of many a successful business man—is printed upon a piece of paper fastened to the mount like the pad. The top furnishes opportunity for original design.

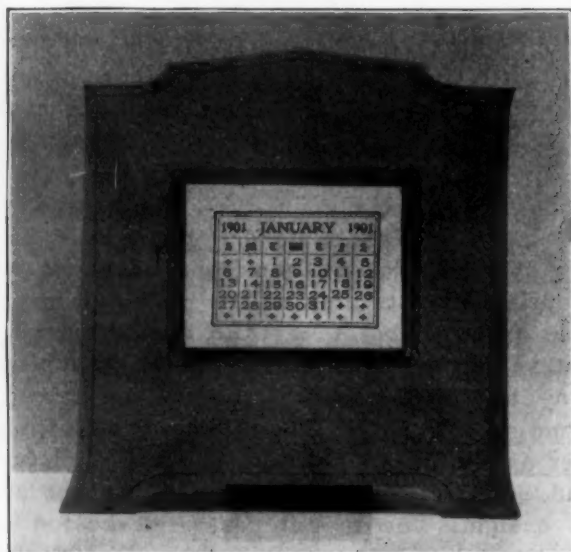


Fig. 4a

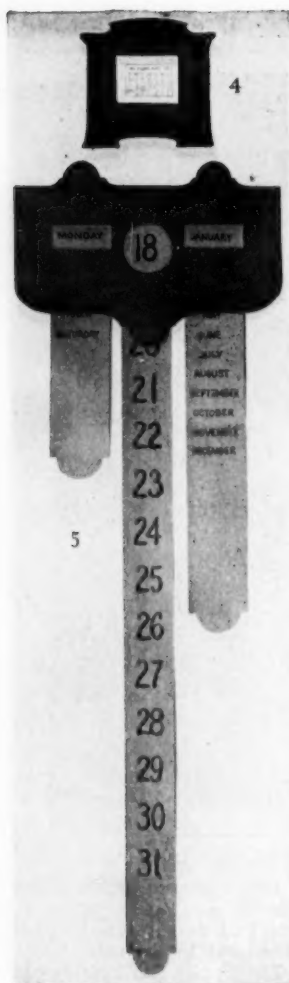
This calendar is here reprinted, for convenience, from the January number for 1902. It was made by a seventh grade boy, Everett, Mass., but might be made as well in a good sixth grade. The order of steps is as follows:

1. The calendar pad, with the size and shape of the mount sketched around it upon manila paper.
2. Study of the outline for modifications for crown and base.
3. Ornament, equally appropriate for all months.
4. The making of the mount from stiff cardboard of appropriate color.
5. The designing and making of the support at the back.



Plate III

This is the business calendar which first appeared in the January number, 1902. The original was made by an eighth grade boy, Everett, Mass. The average ninth grade will find it sufficiently difficult. The sizes of the rolls were figured out by the class and the rolls ordered from the mill as dowels. The knobs and bearings (the knobs cut down) were designed by the class and ordered in bulk from the mill.



## JANUARY

## OUTLINES

A sixth grade calendar might be like Fig. 4a, page 204, or 4 (margin) but with simple ornament. This involves the designing of a foot and crown, for the calendar is supposed to stand upon a mantel or desk. Both 4 and 2 (Plate IV) are appropriate to seventh grade.\*

In the seventh grade and above, the pupils are interested in perpetual calendars. Three styles are illustrated here No. 7, Plate IV, is the simplest, and is made by piercing the card mount with two horizontal slits, through which the strip of paper bearing the names of the months may be moved up and down, and with vertical slits, through which the strip of paper bearing the figures may be moved back and forth. The only trick is to arrange the figures so that they will read properly, no matter under what day the month begins. The right arrangement is as follows:

								1	2	3	4	5	6	7
2	3	4	5	6	7	8	9	10	11	12	13	14		
9	10	11	12	13	14	15,	etc.							

The size of this slip determines the width of the mount, which must be wide enough to hide the slip, wherever it is set. The length of the strip

\* No. 2 came from Quincy, Mass. Miss Lillian Dearborn, Supervisor.

for the months may be shortened one-half by having six months on one side and six on the other. The length of this strip determines the height of the mount. The three inevitable spaces about the calendar suggest, by their position, a motto and two ornamental panels.

Another form of the perpetual calendar is shown at 5. This is like an old-fashioned clock without a case, such as were common in those German engravings in childhood days. The three strips may be of paper or ribbon. The central one may be double-faced, or the ends may be sewed together and the band endless. In this case an ornamental weight shaped somewhat like a T, with the top pierced with a slit for the ribbon, and the stem enriched with ornament, would be desirable. Tassels might ornament the ends of the others. This calendar should be supported on the wall at two points for convenience in changing the dates.

Ninth grade pupils should try a business calendar (Plate III). This calendar furnishes a group of most interesting problems both in construction and design. All these perpetual calendars offer splendid opportunities for original design, for thinking out a thing, from given conditions, for working under severe limitations. It is great fun!

**PRIMARY. First Year. A. Make illustrative drawings for Christmas and other mid-winter stories, using colored pencils.**

The primary children will come to school after the holidays full of vivid memories of Christmas. Have them draw The Christmas Tree, Hanging the Stockings, The Coming of Santa Claus, Christmas Eve, Christmas Morning, etc. Let them draw freely, using such colors as they wish, telling the stories after their own sweet will. This is the beginning of that fearful topic "Model and Object Drawing." Let us all set out merrily at least. After the drawings are made, have them exhibited to the class and discussed. Have the best trimmed and mounted. Try again. When interest in Christmas gifts begins to wane, try the winter sports.

**Second Year. B. Make drawings of toys, using color.**

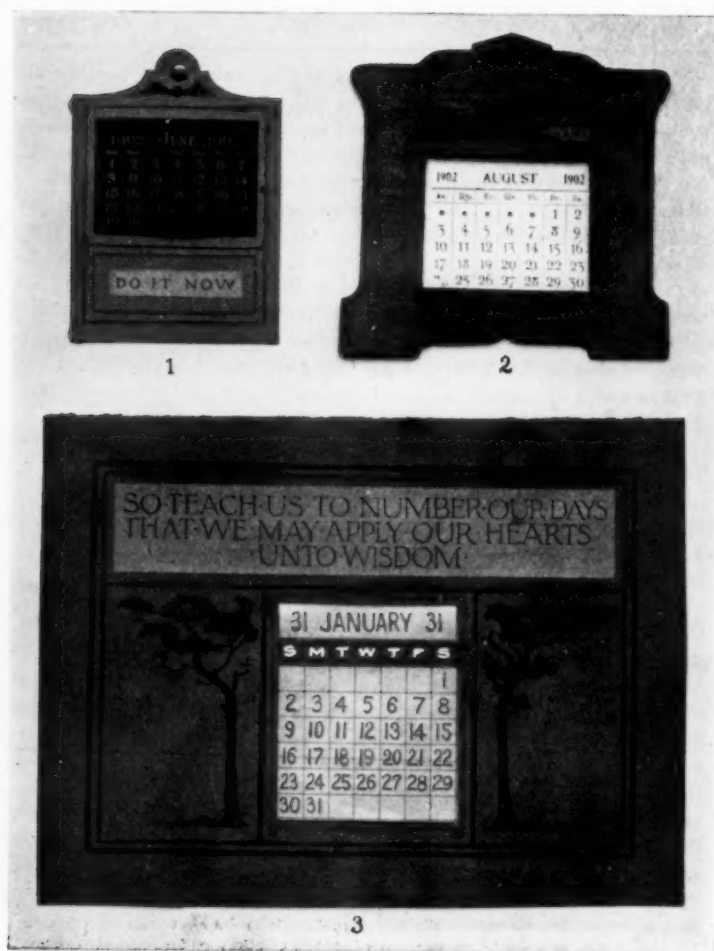


Plate IV

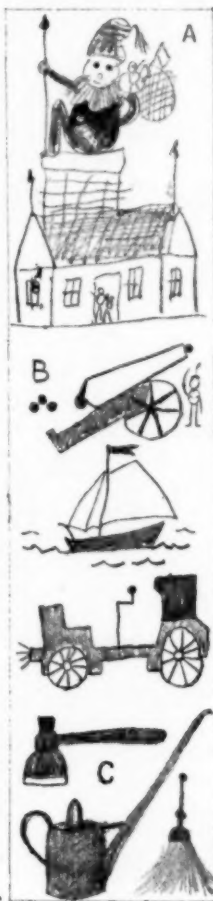
Christmas presents will be brought to school and exhibited with great readiness. These are exactly right for the drawing lesson. Any interesting toy will do, provided it is bright colored and complex. If the children wish to weave a story about any toy and illustrate that, the toy being but an accessory, let them do it. Expression, not repression, is the aim.

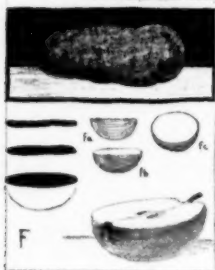
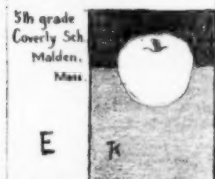
**Third Year. C. Make drawings in color or ink silhouette of common toys or other objects of rather simple, but striking form, such as jumping-jacks, trumpets, swords, oil-cans, ink-fillers, etc.**

The pupil's attention should now be concentrated upon form rather than upon story or action, as in previous grades. Avoid objects of subtle proportions and commonplace outlines. The odder the outline the better. Insist upon constant comparison of the drawing with the object. The one question is, Does the drawing look like the thing? If the details confuse, place the object in the sun behind a curtain and draw the shadow.

**INTERMEDIATE. Fourth Year. D. Make drawings in color from objects of striking shape, including vegetables, such as a beet, carrot, crookneck squash, gourd, and the like.**

The coloring this year may be in water-color, more naturalistic in treatment. Japanese





lanterns suspended singly or in groups are delightful subjects. It is safe to say that taking the country over, no other subject is so well drawn, on the average, by middle grade children. The proper placing of the drawing and its size should be carefully considered. The pupil's initials may be given a somewhat prominent place, as a part of the arrangement.

**Fifth Year. E. Special topic, The Representation of Solidity. Make drawings with the brush and pencil of such objects as oranges, potatoes, apples, etc., represented with ground and background.**

Give special attention to the significance of a change in *level on the paper* as related to a change in *distance in the object*. Discuss the inter-relation of the three elements of a picture, object, ground, background.

For the first lesson, let the desk-top be the ground, the back of the pupil in front, the background, and an orange, an apple stem down, or a ball, be the object. Cut from stiff paper or card a frame with an opening of about 2 x 3 inches. Sitting well back in the seat, view the object through this frame, using one eye only, until it can be seen *as a picture drawn within the frame*. Then note the proportion of ground to background, and how it may be varied. Note how the apparent size of the object within the frame may be varied by moving the frame nearer to the eye or farther away. Notice where the shelf-line (the



line where ground meets background) appears to come against the outline of the object. Draw the object in outline, with the brush, add any characteristic markings. Indicate the background by a wash of black or gray.

**Sixth Year. F. Special topic, The Foreshortening of the Circle. Make drawing with the brush and pencil of such objects as a half orange, half apple, saucer, or other hemispherical object represented with ground and background.**

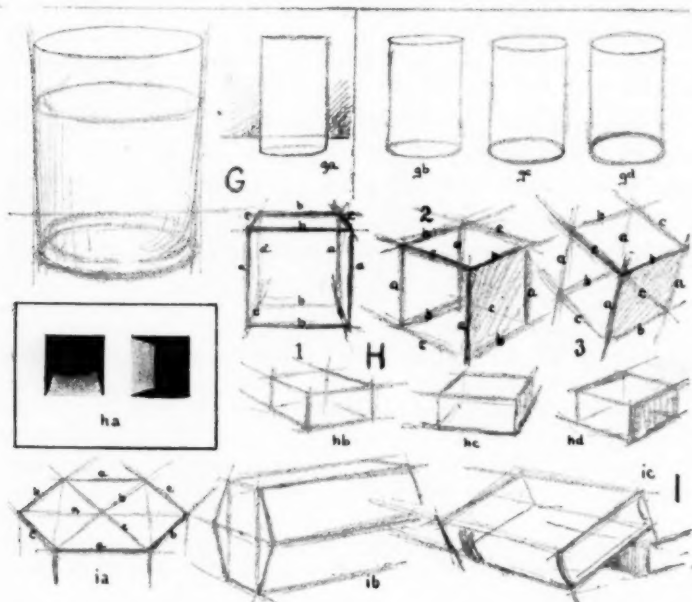
After an introductory elucidation of the topic, have the pupils collect illustrations of foreshortened circles—pictures in advertisements and the magazines.

The first lesson might be the holding of hemispheres in positions indicated upon the board by sketches such as those at fa, fb, fc, etc. The teacher can hardly make too many illustrative drawings for the pupils to interpret. In first practice in drawing let the pupils work with the brush and a dull yellow wash, if the object is a hemispherical model or a half apple. Begin with the foreshortened circle. Put a streak of yellow on the paper and widen it, extend it, push its outlines out with the brush until they form an ellipse like that shown by the foreshortened circle. Add the semi-circular part, and indicate the background.

**GRAMMAR. Seventh Year. G. Special topic, The Effects of Changes in Level. Make drawings with the pencil of such objects as glass tumblers, cylindrical boxes, bottles, jars, tubs, pails, barrels, etc.**

At first make many rapid sketches illustrating the principle, and have the pupils collect illustrations from the magazines, etc.

In the rapid sketching think of the solid as transparent, and sketch the whole of every edge or outline each time. Make sheets of three-minute sketches, such as those shown at ga, gb, gc, etc. Finish the



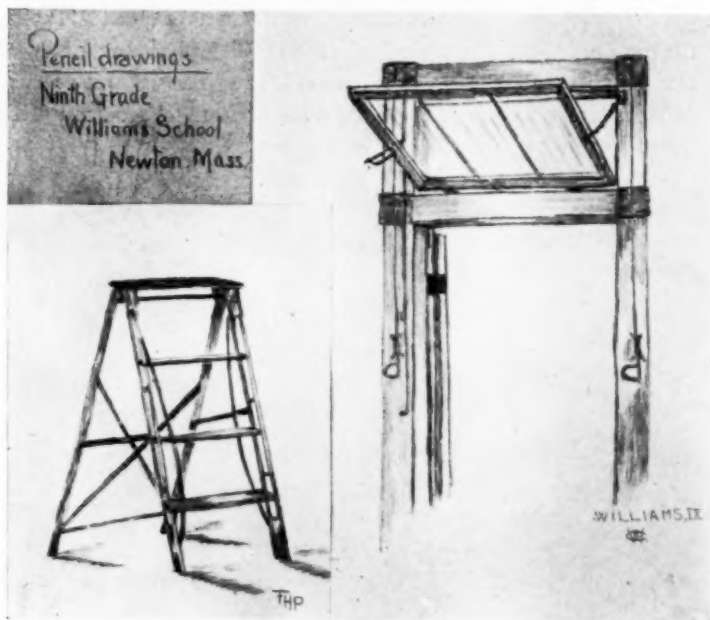
final drawings with three tones consistently selected, as white, black, middle gray; light, dark, middle gray. Color may be substituted for gray.

**Eighth Year. H. Special topic, Convergence.**  
**Make drawings in pencil of rectangular objects involving one and two sets of converging lines.**

Teach convergence as a result of distance and foreshortening; make "vanishing point" entirely subordinate, at first. A useful device for purposes of illustration is a card with a "door" in it, ha. Collect illustrations. In sketching think of every rectangular object

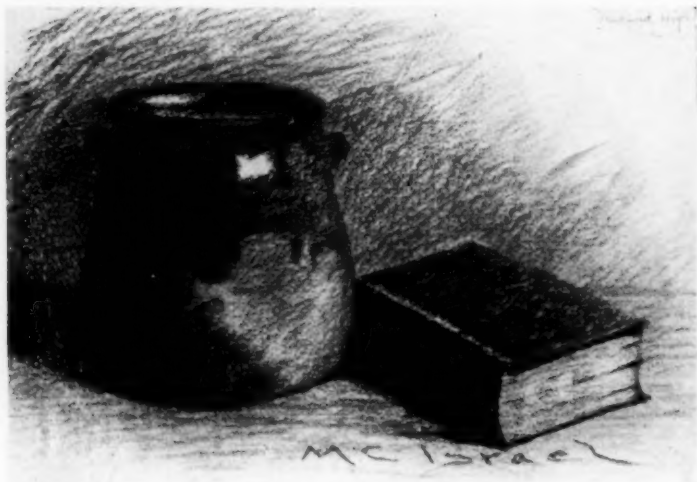
as presenting to the eye three sets of parallel lines, and three only, but always three, sometimes two sets actually parallel, 1, sometimes one set, 2, and sometimes none, 3. Make dozens of rapid sketches similar to hb, hc, etc. Finish final drawings in three values of color or gray.

**Ninth Year. I. Special topic, Convergence.** Make drawings in pencil of objects involving simple elements under unusual conditions, as, for example, books tilted up at an angle, bottles and vases upset, chairs tipped back against the wall, etc.

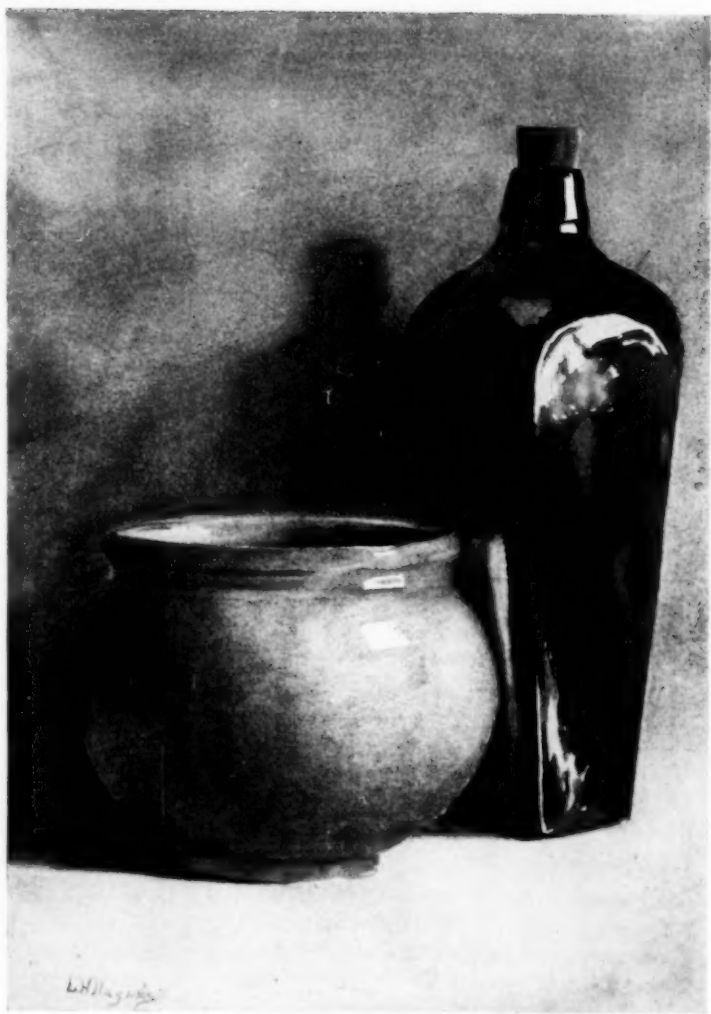


In this grade all the principles previously taught are to be reviewed, and the typical forms so thoroughly known that they may be sketched in any required position without the model. The hexagonal prism is a good test of ability. Nothing new is involved in the drawing of the objects suggested, merely new phases of elements already known demanding closer observation and greater skill in sketching. Aim at drawings correct in principle, if somewhat crude in execution.

**HIGH SCHOOL. Freehand Classes.** The principles of model and object drawing, as outlined for the lower grades, should be reviewed, and much practice given in sketching common objects from memory. The grouping of objects for pleasing effects should be studied and practiced, and the groups drawn in pencil for good outline, in charcoal for light and shade, and in water-color.



Charcoal drawing. High School, Medford, Mass.



Water color drawing. High School, Newton, Mass.

Lectures or topics for study bearing upon the history of art should be given by the supervisor or special teacher, and illustrated note-books or topic-books should be kept by the pupils. Pictorial art would best come first, as directly related to grouping and composition—the work in hand.

The method pursued must of necessity be determined largely by local conditions. Suffice it to say the history of painting should be closely related to other history, and to a scale of time, so that important events and painters may be grouped properly. The year 1500 is the high-water mark in the Renaissance in Italy. How many masters were alive and in their glory at that time!

**Mechanical Classes.** The more complex problems in geometry, practice in inking, and in tinting connected with the working out of a set of plans for a simple building—some structure in the vicinity of the school, which may be sketched and measured, are appropriate at this time; or such work in mechanical drawing as may be necessary to fit for some higher institution.

A series of plates will soon be published as a supplement to the Book by Miss Lillian Dearborn of Quincy, giving the requirements in mechanical drawing for admission to the Massachusetts Institute of Technology and institutions of similar grade.

Lectures or topics for study bearing upon the history of structural art should be given by the supervisor or teacher of drawing; and illustrated note-books or topic-books should be kept by the pupils.

In these lectures emphasis should be placed upon the lives and works of the great craftsmen, Cellini, Morris and the like, as important, in their way, as the great masters in painting.

## HELPFUL REFERENCE MATERIAL FOR JANUARY WORK

- Calendars, illustrated. Applied Arts Book, Jan. 1902, pp. 30, 31.  
 The Calendar Mount. Daniels. Jan., 1903.  
 Convergence. Sargent. Applied Arts Book. April, 1903, p. 239, etc.  
 Cross. Freehand Drawing, p. 58, etc.  
 Cube, in perspective. See Convergence. Also Cross. Freehand Drawing, p. 59, etc.  
 Cylinder, in perspective. See Foreshortening. Also Cross. Freehand Drawing, p. 62, etc.  
 Foreshortening. Sargent. Applied Arts Book, March, 1903, p. 193, etc. Cross. Freehand Drawing, p. 56, etc.  
 Hemisphere, in perspective. See Foreshortening.  
 Hexagonal prism. Cross. Freehand, p. 64, and plate p. 75.  
 Illustrative Drawing. Daniels. Applied Arts Book, Oct., 1901, p. 12, etc. Cremins. Graphic Expression in Childhood. Year-Book, C. S. M. A., 1903, p. 46, etc. Illustrated.  
 Lettering. Hall. The Making of Good Letters. Applied Arts Book, Sept., 1901  
 Light and Shade. Cross. Light and Shade. Ginn & Co.  
 Model and object drawing. Sargent. Applied Arts Book, Feb., March, April, 1903.  
 Mounting drawings. Parsons. Applied Arts Book, April, 1903, p. 225, etc.  
 Object drawing. Tadd. New Methods in Education, p. 173, etc.  
 Outline drawing. Cross. Freehand Drawing, chap. 1.  
 Pencil Drawing. Berry. Applied Arts Book, May, 1902, p. 1, etc.  
 Placing, within margin lines. Bailey. Year-Book, 1902, pp. 100-112.  
 Plans of buildings. Edwards. Mechanical Drawing, Applied Arts Book, March, 1903, p. 205, etc.  
 Tilted objects in perspective. Cross. Freehand Drawing, pp. 78, 79.  
 Tones, use of two and three. Dow. Composition, sections XVIII to XXII. Kettelle. Composition in Fine Art, Chap. V.  
 Toys, drawing of. Sargent. Applied Arts Book, Feb., 1903, p. 173, etc.

## THE SCHOOL LIBRARY



**B**IBLIOGRAPHIES of such a live subject as Art Education are out of date almost as soon as they come from the press. They must be revised every year, or be relegated to that state of the sonorous name, innocuous desuetude. Every drawing teacher in the country will be increasingly indebted, year by year, to Miss Louisa Pierce of New York, who has undertaken the task of recording annually, in the Year-Book of the Council of Supervisors of Manual Arts, "The Year's Progress in the Manual Arts." The first record as it appears in the Third Year-Book, just issued by the Council, is well planned for ready reference, discriminating in its statements, and surprisingly complete and accurate. It brings the bibliography of the subject up to date.

**Year-Book; Council of Supervisors of Manual Arts.**  
1903. Size 7x10, 160 pp. Illustrated. \$3.00. Dr.  
James P. Haney, Secretary, New York.

The appearance of this unique volume is always awaited with interest. This year it contains ten papers. Two are upon supervision. Dr. Haney writes upon supervision in cities, and Mr. Bailey in states. Two are upon drawing in high schools. Applied Art, Miss Mabel E. Stock; Drawing, Mr. Harold Haven Brown. Two are upon Design. Mr. Ernest A. Batchelder writes upon the Principles of Pure Design, and Mr. James Hall of Applied Design. Two are in the nature of bibliographies; Miss Pierce's article, to which reference has been made, and Prof. Churchill's on The Meaning and Aim of Art in Education. Miss Julia C. Cremins treats of Graphic Expression in Childhood,



and Mr. Frederic L. Burnham of the Psychology of Drawing. On the whole, the articles are well-written and valuable.

**Pictorial Composition. H. R. Poore, A. N. A. The Baker & Taylor Co. 1903. Size 6 1-2 x 10, 256 pp. Illustrated. \$1.50**

Probably the best book upon the subject for pupils in high, normal, and art schools, as well as for "the student of painting, the amateur photographer and the professional artist." Mr. Poore's style is clear, direct, readable, and all his illustrations are to the point. He speaks with the authority of one who knows a subject from the inside. His plates showing the "Fundamental Forms of Construction," and the "Fundamental Forms of Chiaroscuro," are invaluable. The book is full of quotable sentences. Here are a few: "Between the life class, with its model standing in academic pose, and the pictured scene in which the model becomes a factor in the expression of an idea, there is a great gulf fixed." "Good art of the gallery is the best guide to a trip afield." "There is always a rebellious member in every picture which continues unruly throughout its whole construction." Speaking of the necessity of consistency in the parts of a picture he says: "The haymaker creates a sensation on Broadway, but no more than Dundreary crossing a plowed field in Oxford ties." His characterizations are suggestive. "The message of impressionism is *light*: the effort of the early painters was *to secure light*." Part II, which treats of "Breadth versus Detail," is especially valuable to high school pupils. Part III, "The Critical Judgment of Pictures," strikes at the heart of the matter in the opening sentence: "Art is a middle quality between a thought and a thing."

The inexcusable fault in the book appears in its imperfect references. Usually there are none sufficiently definite and one has to hunt through the book for the illustration cited. Where for once, on page 174, the author is definite, and says, "See page 39," he is wrong, for the cut referred to is on page 43.

But there is usually a fly in the ointment. The book is invaluable. It should be in every school library.

**Lettering.** Charles W. Reinhardt. Van Nostrand Company. 1903. Size 11 x 8, 34 pp. text, 12 plates. \$1.00.

A clear, practical treatise on "Freehand Lettering for working drawings," valuable to all who have to do with lettering for any purpose whatever. It is abundantly illustrated with Gothic and Roman alphabets, upright and italic, and with examples of their use in headings and in running text, and in connection with maps and other complicated drawings. The order and direction of strokes in drawing letters and figures are given with unmistakable clearness, but the refinements of thickness and proportion are overlooked. The chapter on "Lettering for Photo-reproduction" adds to the value of this sensible book.

**Freehand Lettering.** Frank T. Daniels. D. C. Heath & Co. 1901. Size 7 1-2 x 6, 34 pp., 13 plates. 75 cents.

A reliable, little manual with an arrangement of plates which allows of their being constantly in sight for reference when the book is opened at any page. The Gothic alphabet is emphasized as the simplest and best for first practice. The Roman has been slighted, and the examples given, Plates 8 and 9, are not especially attractive. The refinements of size, proportion, and spacing of Gothic letters, are well explained and exemplified.

**Basket Making.** T. Vernetta Morse. Art Craft Supply Co., Chicago 1903. Size 5 x 7, 32 pp. Fully illustrated. 25 cents.

**Bead Work.** (The same).

These are the first and fourth in a series of "How to Do It" manuals. It would be difficult to find pamphlets which give more information (and fewer words) for the money. They give all directions required by a novice, and a progressive series of exercises, clearly described and fully illustrated.

**Teachers' Memory Gems. Priaux and Welch.**  
**W. M. Welch Company, Chicago. Size 5 x 7 3-4,**  
**64 pp. and interleaves. 40 cents.**

Brief biographic notes are given of eleven American and fifteen English authors, all recognized masters, with quotations from their works. There are also twenty-two pages of miscellaneous quotations. Blank interleaves give opportunity for additional quotations from each author, according to individual taste. Nothing could be more charming than the Model Lesson where an author is introduced to the children. The quotations are mostly for upper grammar and high school pupils.

**The December magazines are rich in reference material along art educational lines.**

#### **Booklovers.**

The frontispiece is a good three tone print of Raeburn's Sir Walter Scott. The "Pictures and Art Talk" department gossips entertainingly and presents eight color prints, The Stream by Frederic Ede; Idle Moments by Joseph Bail, and Sunset by Bruce Crane being the most consistent. The Child in Art by Estelle Hurll, possesses the usual good qualities of her work to recommend it, with eleven illustrations which would appear excellent were it not for such reproductions as one finds in Masters in Art. No teacher of Geography can afford to overlook The Frost King at Niagara with its superb half tones. A brief article on The Art of Paul Helleu by Fitz Roy Carrington, reprinted from the Metropolitan Magazine and accompanied by a picture of the artist in his studio, is valuable because so little is available concerning this new maker of a "type."

#### **Century.**

The frontispiece in color is not so successful as the pictures by Maxfield Parrish, illustrating Miss Wharton's Sienese Villas. The "Vicobello" poplars are ideals for children to study. Alfred Brennan's pen drawings of Chrysanthemums are at once delicate and vigorous.

The drawings by Charlotte Harding in *Temptations to be Good*, those by Fanny Cary in a *Christmas Rescue*, and those by Ellen Thompson in *Children of the People*, furnish suggestions for pose drawing. Timothy Cole's wood engraving from Murillo's *Adoration of the Shepherds* is a charming frontispiece for the interesting article on *Christmas Mangers* by Emma Ernestine Porter. Present day children will enjoy *You at School*. The pen sketches by F. D. Steele are wholesome bits of work for high school pupils to see. One on the Barber by E. W. Blaisdell, is a clever bit of animal caricature. Among the advertisements an original note in decoration is struck by the *Metrostyle Pianola*.

### Craftsman.

An unusually rich number from our point of view. The *Sacred Ciphers*, a well illustrated article by Caryl Coleman traces the history of the XP and IHS ciphers in Christian art. Miss Sargent's fine translation from the French of Jean Schopfer, upon *The Silversmith's Art* is continued with profuse illustration. *Pictured Poesies* by Edith Moore touches a phase of art not often considered, but of great interest, especially to children of grammar school age. How to build a *Bungalo*, will furnish suggestions for Manual Arts High school teachers. The wood working teachers will find *Ancient and Modern Chests and Cabinets* by Grace L. Slocum worth careful reading, and the metal working teachers will enjoy both the text and illustrations in *An Appreciation of the Work of Robert Jarvie*. The *Hingham Arts and Crafts* by C. Chester Lane contains fine illustrations of baskets, embroideries, and netted fringes. *Needlework in Newcomb College* and *Stenciled Fabrics in combination with Peasant Embroidery* have other suggestive illustrations. The *ABC of Decorative Art*, is the first of a Series which promises to be of great interest. The article which above all others teachers of manual training in elementary grades should lay to heart is that on *Simple Toys for Children*. It is richly illustrated. *Craftsmanship in the New York Schools* by Jacob I. Milsner shows how successful the correlation of drawing and manual training has been under the leadership of Dr. James P. Haney.

**Harpers.**

Of the full page illustrations in color by Howard Pyle for Peire Vidal, the second and the fourth are best as harmonies of color. The atmosphere and the feeling of movement in the Train of King Alfonso are especially good. In the Playground of Paris a difficult subject is wonderfully well handled by A. Castaigne, p. 42. Henry Wolf's wood engraving from The Wood-Gatherers by George Inness, is worthy a frame by itself. It is as atmospheric, almost, as a Carot. The Masterpiece, The Journey, and the Mystic, by Elizabeth Shippen Green, are well composed and drawn with outlines which are at once bold and delicately responsive to the embodied idea. The camels in The Lords of Sahara should be placed in the annual box for use next Christmas by the Wise men.

**House Beautiful.**

A decorative margin design in two tones of gray for The House Beautiful and that for Our Colonial Room in one tone of gray and white are good bits of work for grammar school pupils to see. A Word about Japanese Prints by Olive Percival is instructive and well illustrated. A Swiss Chalet in New Jersey by Joy Wheeler Dow, will be found of interest to the teacher of wood working, and Structural Style in Cabinet-Making by Gustave Stickley, of such importance that it should be "laid to heart." The Decoration of a City House by John Ednie is an example of L'Art Nouveau outré! The "unit of design" appears at first sight to be a knot of electric light wires and broken lamps! but it is not really so bad as that.

**McClure's.**

The delicate pen drawings by Ernest Haskell illustrating The Song of the Saw-mill, will show high school pupils what a pen can do in the hand of one who is its master. Compare their handling with that in the sketches by F. R. Gruger in the Pimienta Pancakes, by Charlotte Harding in Ellie's Furnishing, and in that yet more vigorous sketch of Rockefeller by George Varian,—a masterpiece of simplicity and force. An invaluable series of articles by John La Farge dealing with One Hundred Masterpieces, begins with Portraits of

Civic Life, with illustrations from Van der Helst, Frans Hals, and Rembrandt.

### **New England.**

Six madonna pictures form the fourfold frontispiece of this Christmas number. In *The Revival of Fireside Industries* Katherine Louise Smith sketches the principal centres of influence of the art-craft movement of our time. John H. Tarbell's *Experiences in Photographing the Negro in the South* furnishes admirable suggestions for pose drawing in costume. The United States National Museum, by Randolph I. Geare, makes the Government collections at Washington so attractive that every teacher of drawing, nature study and history who reads it will be sure to visit the museums when next in Washington. The illustrations furnish suggestions for both decorative and constructive design.

### **Outing.**

Excellent photographic pictures of English Gun Dogs, Hunting Horses, and Indians. Charming sketches of boys in winter by B. Cory Kilvert, as full of life and character as boys themselves. Henry S. Watson's pen drawings for *The American at Play* are good examples of what can be done with the least possible amount of black. His full-page illustration, page 331, shows that he can manage the brush as well. Notice the light in the sky and the treatment of the reflected light upon the water. Compare the reflections with those on page 335. Dan Beard's article on *Snow Houses and Snow Men* will "go to the right spot," with every live boy.

### **Scribner's.**

Rich in color printing. The diversity of styles here comparable makes this number especially valuable. Penfield's *Holland Sketches* are in almost flat tones in mosaic; The charming *Child in a Garden* pictures, by Jessie Willcox Smith, are bold and wet in handling, with soft edges and strong contrasts of color; the frontispiece, by Maxfield Parrish, is as soft and rich in its subdued tones as a Rembrandt might be if thus reproduced. The two Venetian subjects in black

and white could not have been better if Parrish had made them for high school pupils to study for composition and handling. The decorations by G. Alden Peirson for the Ode to Music are sufficiently odd and cold! The article on Buda and Pest is enriched by a masterly set of drawings in pen and ink and wash by Peixotto. That called "A Café facing the Danube," is especially fine in its values. The appreciations of Sargent's Dogma of the Redemption in the Boston Public Library, by Russell Sturgis and Frank Fowler, must not be overlooked by one who would enjoy the decorative art of his own country.

### St. Nicholas.

Happy Days contains illustrations in black and white and in pen and ink, which in their subjects will please primary children, in their composition and handling will instruct high school pupils, and in their figures will be suggestive for pose drawings in upper grammar grades. A Christmas Evening Party in ye Olden Time is beautifully soft and rich in values. The Three Caskets has four full-page illustrations, valuable in the history of art, to show the characteristic architecture and costume of the Egyptian, Greek and Medieval epochs. St. Saturday is a good bit of decorative pen work. The Signs of Old London has curious information and illustrations of quaint signs, not to be despised by manual arts boys. A Nonsense Calendar for December has a border of holly leaves quite fresh and original in treatment, and worthy of emulation. There are two live blue-jays, pp. 171 and 172, worth putting in the bird box.



## THE CATCH-ALL



RETURN to hard work after the holidays ought to be easy, if the holidays were well spent and the New Year's resolutions were adequate. But easy or not, let us say with Odysseus of old, "Bear up, my heart!" And may it be with us as it was with him; for in "obedience his heart held firm and steadfast, though he himself tossed to and fro with thinking how he might accomplish his end."

MR. MILLER'S sensible article, saturated with the wholesome spirit of the man who has given his life to doing one thing well, and has done it, ought to brace us as we start, more effectively than any stirrup cup. "Not how much, but how well;" let that be our watchword for 1904.

BECAUSE this number contains an article on Hammered Metal, it is not necessary for you to lie awake these long nights thinking how to introduce that into your school, or regretting that it is impossible for you to do everything. Do what you can do as well as you can do it, and don't worry. Mr. Sanford's simple, clear exposition of how to begin will be just what somebody is looking for. I hope it will not disturb anybody who is not ready for it. The second part will appear in the February number.



**L**ETTERING, as a school art, is becoming prominent in these days. It is worth acquiring. I have ever remembered with thankfulness one grammar school teacher (with whom we had a two-ring circus all the time for two years), because she discovered that I could be kept out of mischief by lettering. She bought a book on lettering for me to study, and invented occasions for me to do lettering upon the blackboard. Whenever I mark an express package, plan a title page, or draw an ornamental initial, that long-suffering teacher comes before my mind, and I have to say "thank you" again.

**G**OOD lettering is not so hard to get if one goes at it thoughtfully. The great temptation is to begin at once trusting to luck to come out right. The better way is to print quickly, and merely in skeleton, the words you wish to use, upon a slip of paper, making the letters about the size you think will do. This will furnish a basis for planning the lettering in its right place. It will show whether the letters must be made larger or smaller to fit the space; where to begin that the end may be right; how to modify the spacing between letters and words.

**T**HE chart for the teaching of lettering in the New York city schools, as published by Dr. Haney, is, with his generous permission, repro-

## A SYSTEM OF LETTERING

PREPARED FOR USE IN CONNECTION WITH SCHOOL WORK IN DESIGN.

ALL LETTERS WITH EXCEPTION OF I ARE FORMED WITHIN EQUAL PARALLELOGRAMS. FOR I ALLOW A HALF SPACE ONLY. HORIZONTAL DIVISIONS ARE IN THIRDS. THE CROSS LINES OF R, E, F, R, S ARE ONE-THIRD FROM TOP, OF A, ONE-THIRD FROM BOTTOM. NOTE PARTICULARLY THE SHAPE OF K, M, N, W AND Y. C, G AND Q ARE FORMED ON O. ALL LINES FORMING LETTERS ARE TO BE KEPT OF EQUAL WIDTH, NO SHADING BEING INTRODUCED.

A B C D E F G H I J K L M N O P Q  
R S T U V W X Y Z

The above gives letters of moderate width. The letters may be extended or contracted horizontally by changing the width of the parallelogram.

A B C D E F G H I J K A B C D E

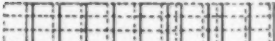
The height of the parallelograms may be changed as well as the width. A group of letters may thus be made to fill any given space.

A B C D E F G H I J K L M N O P Q R S T U

Titles in school work should be lettered in capitals. The small letters are not necessary. To letter any word as "Composition" the following steps should be taken:—

1. Decide width and height of title and draw this oblong very lightly in pencil in place where title is to appear. The margin on right side should be about  $\frac{1}{4}$  in. (one-quarter the width of a letter space) less than on left. This difference is later adjusted in the spacing.
2. Divide the space for title into three equal oblongs by two horizontal lines.
3. Divide the space for title into parallelograms by vertical lines, making as many spaces as there are letters in the word and all of equal width save that intended for letter I, which should be but half as wide as the others.
4. Space title by subdividing each vertical space for a letter by a light line on the right hand side of space, cutting off one-fourth of width of space. The narrow spaces thus formed will fall between the letters. The one at the right hand end of title will not be used.
5. Sketch in letters with pencil, then line in with ink.

NOTE.—The first three steps are shown in A. The 4th and 5th in B.

A  • COMPOSITION

The same process should be observed in lettering a title of several words, except that a space equal to a letter should be left between words. For Public School allow twelve full spaces and one half space for I. To give variety the initial letters of important words may be made larger.

P U B L I C S C H O O L

In a title of several lines the heights and widths of the letters in the different lines may be varied as well as the thickness of the stroke used in making the letters.

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duced herewith. It is simple, and adequate for lower grade pupils. In the high schools (possibly in the last grades grammar) something of the refinements of good lettering should be taught. Miss Perry's article deals with this subject. The chart which she has prepared, published as a supplement this month, will enable teachers to bring to the attention of their pupils the characteristic elements of letters and some of those nice adjustments of part to part which distinguish excellent lettering.

THE Outline this month gives the initial work in model and object drawing in all grades. In some respects it is different from the usual outlines for that topic. On the one hand, the findings of such investigators as Sully, Leukens, Barnes and O'Shea upon what should be done have not been disregarded; nor upon the other have the almost equally important findings of the grade teachers and supervisors as to what can be done in a grade in a month. The aim is to teach thoroughly one principle in each grade each year, after having trained the child to focus his attention upon the elements of form. The order briefly stated is this:

- I Forms in use, as the child sees them.
- II Forms for use, as the child likes them.
- III Useful forms as they are.
- IV The proportions of forms as they appear.
- V The representation of the third dimension.
- VI Foreshortening.
- VII Convergence.

**I**N following such an outline too much stress cannot be laid upon illustration, repetition, drill. Facility in drawing, like facility in language, comes only through practice. Ten illustrations to one description, ten sketches to one drawing, ten different things in one hour instead of one thing for ten hours, will be the method. The high school is the place for that prolonged searching for detail which characterizes the master who would intend much in his drawing. Intelligible English should be the early ambition, elegant English the later ambition; but, after all, the chief ambition throughout should be to have something worth saying to say. Likewise the order is intelligible drawing, excellent drawing, and always purposeful drawing.

**A** SUPERVISOR asks: "What can be done in constructive drawing and design in a small town where no provision is made for manual training, where no time can be given to manual training in school hours, and where from two to six grades must be taught at the same time." Mr. Walter Sargent, State Supervisor of Drawing for Massachusetts, will answer that question before long in an illustrated article. It is an important question, especially in view of a recent remark by President Eliot: "Any kind of manual training is worth more than nine-tenths of all the work in the public schools that comes under the head of arithmetic."

"SEND a stamp and get a dollar's worth"—that oft repeated injunction of the advertising sharp—for once will come true. Send a stamp to Prof. Edward S. Morse, Salem, and ask for a copy of his address, "Can City Life be Made Endurable," and see for yourself.

AMONG the special topic magazines which come to my desk none has a more self-respecting, trustworthy, companionable appearance than the "Journal of Geography," from Chicago.

THE Perry Magazine is more attractive, at first sight. I always look a new number through with great satisfaction, and recall again what an educator it has been.

THE Manual Training Magazine is more scholarly in appearance than either of the others. It has the Chicago University manner, so to speak. One cannot keep posted without it.

HANDICRAFT is almost too aristocratic. It is faultless in appearance, but coldly reserved. I cannot find upon its face a hint of the good things inside! But like other aristocrats, it is well worth knowing.

MASTERS in Art is a prince among them. The educational world holds nothing finer in the way of periodical literature.

**O**UR subscription list has nearly doubled since the first of September. Excellent! But there are thousands of teachers who do not yet know about the School Arts Book, and who will be glad to have it brought to their attention. Every subscriber can help to advertise it by using our drafts.

**E**NLARGE our constituency and we can enlarge your magazine.